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United States Department Of Agriculture | Forest Service | Shasta-Trinity National Forests

Reply To: 3420 Date: July 5, 1990

Subject: Biological Evaluation of Port-Orford-cedar Root Disease in the Proposed Baker Flat Timber Sale, Gasquet RD (Report No. N90-6)

To: Forest Supervisor, Six Rivers National Forest

On June 18-19, 1990, Melissa Marosy, RO pathologist, Dave Schultz, entomologist, and I surveyed areas within the proposed Baker Flat timber sale, Gasquet RD, for Port-Orford-cedar (POC) and the root disease associated with it, caused by Phytophthora lateralis. This was at the request of District personnel because of the concerns for the area and the recent identification of the root disease in one of the drainages.

We initially surveyed the entire road system within the sale area, except for the spur road (18N17D) between units 14 and 15, to locate POC. We concentrated on the road system because of the likelihood that this would be a point of entry for the disease. We avoided the spur road at this time because of the known occurrence of the disease in its vicinity. The District had indicated locations where POC occurred and our findings indicated those were accurate. We found only a few additional locations where small amounts of POC were present. All of the POC was present in drainages or low-lying, wet areas. We did not observe any dying or declining POC during this survey.

Following the road survey, we walked several drainages where concentrations of POC occurred and where past activities could have introduced the disease. These locations are indicated on the enclosed map. They fall in units 3, 14, 15, 17, and 22. Only the drainage in unit 15 was found to be infected. This is the location where the root disease had previously been identified. A single dying POC was found in the drainage in unit 22 several hundred feet below Road 18N14C (signed 18N17E). All other POCs in the drainage appeared healthy. Some stain of the phloem suggestive of POC root disease was found, but the fungus was not isolated from the tissue. The crown decline was more typical of insect attack, not root disease. I do not believe POC root disease is present in this drainage.

MANAGEMENT ALTERNATIVES

The following alternatives will influence POC root disease by altering the probability of new introductions of the disease and the likelihood of disease spread. Regardless of alternative, once the disease is introduced into an uninfected drainage, the result, loss of much of the cedar resource in the drainage, will be the same.

1. No Action. This alternative would implement the timber sale as proposed with mitigation measures to reduce the likelihood of introducing POC root disease

into new areas within the sale area. Units 14 and 15 should be the last units entered in the sale. This would reduce the risk of spreading the disease to other areas during the sale. There would still be some possibility of spreading the disease from the sale if unit 15 was inadvertently entered before other units. Also, the disease would be more likely to be spread in the future if Road 18N17D remained open to traffic.

2. Drop Unit 15. The timber sale and mitigation measures, as proposed, would be implemented, except that the north end of Unit 15 would be dropped from the sale. The area accessed north of the intersection of roads 18N17E and 18N17D would be dropped from the sale. The actual area is noted on the map. Road 18N17D would be permanently blocked at this intersection. Unit 14 would be harvested upslope to Road 18N17. Machinery access to the eastern half of Unit 14 would be restricted. No equipment would be allowed within 100 feet of Road 18N17D. Cable yarding systems would be most appropriate for this area to reduce the chance of moving diseased material. This would limit the chance of transporting the disease from the currently infested area to other areas within the sale boundary. The economic value of the dead and dying POC within Unit 15 would be lost. Permanently closing the road would reduce the chance of transport of the disease by others from the infested area following the sale.

Because of the amount of POC in drainages in the eastern side of the sale area and probable continuations of POC concentrations downstream along Monkey Creek, the introduction of the disease into these areas might affect a variety of resources. Dropping this part of unit 15, in conjunction with other mitigation measures, will lessen the chance of spreading POC root disease to these areas.

3. Drop Baker Flat T.S. The timber sale would not be implemented. This would reduce the chance of spreading the root disease because of sale activities to zero. The disease could still be spread by other management activities or by the public, especially if Road 18N17D remains open. Improper controls on access and maintenance of the gate at the beginning of Road 18N17 would increase this chance.

Suggested Prescriptions to Reduce POC Root Disease Introduction and Spread
(Keyed to "Generic Prescriptions for POC Root Disease Prevention and Control")

E-7 Close roads with guardrails, physical blockades, or "putting to bed".

E-8 Avoid dust abatement with potentially infected water or treat water with chlorine.

E-11 Establish road rules to prevent timber haul during periods when spores will be spread widely.

T-1 Limit the operating season of timber sale operations to the drier months.

T-2 Wash logging equipment before entering sale area.

S-11 Minimize management entries during wet weather. Wash vehicles when such entries are made. Must be associated with a formal road closure.

O-2 Administrative closure orders.

O-3 Coordinate firewood utilization with POC control needs and road closures.

If there are any questions about this survey or if you need additional assistance, please contact me at the Shasta-Trinity SO (916-246-5101).

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Enclosure